ABSTRACT OF THE DISCLOSURE

[43]   Certain embodiments relate to a system and method for forming a virtual isocenter in an imaging system. The method includes determining a distance between a detector and an object to be imaged, determining a distance between a detector and source, varying either or both distances between image exposures, and adjusting image data obtained from the image exposures for a change in magnification between image exposures. The distance may be determined using a tracking system. The method may also include reconstructing at least one image of the object from the image data adjusted for the change in magnification. Additionally, a position of the object may be maintained at a virtual isocenter formed by varying the distance between the detector and the object and/or the source and the object. The method may further include moving a support including the detector and a source in a non-circular path to move the detector and the source around the object while varying the distance between the detector and the object.

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